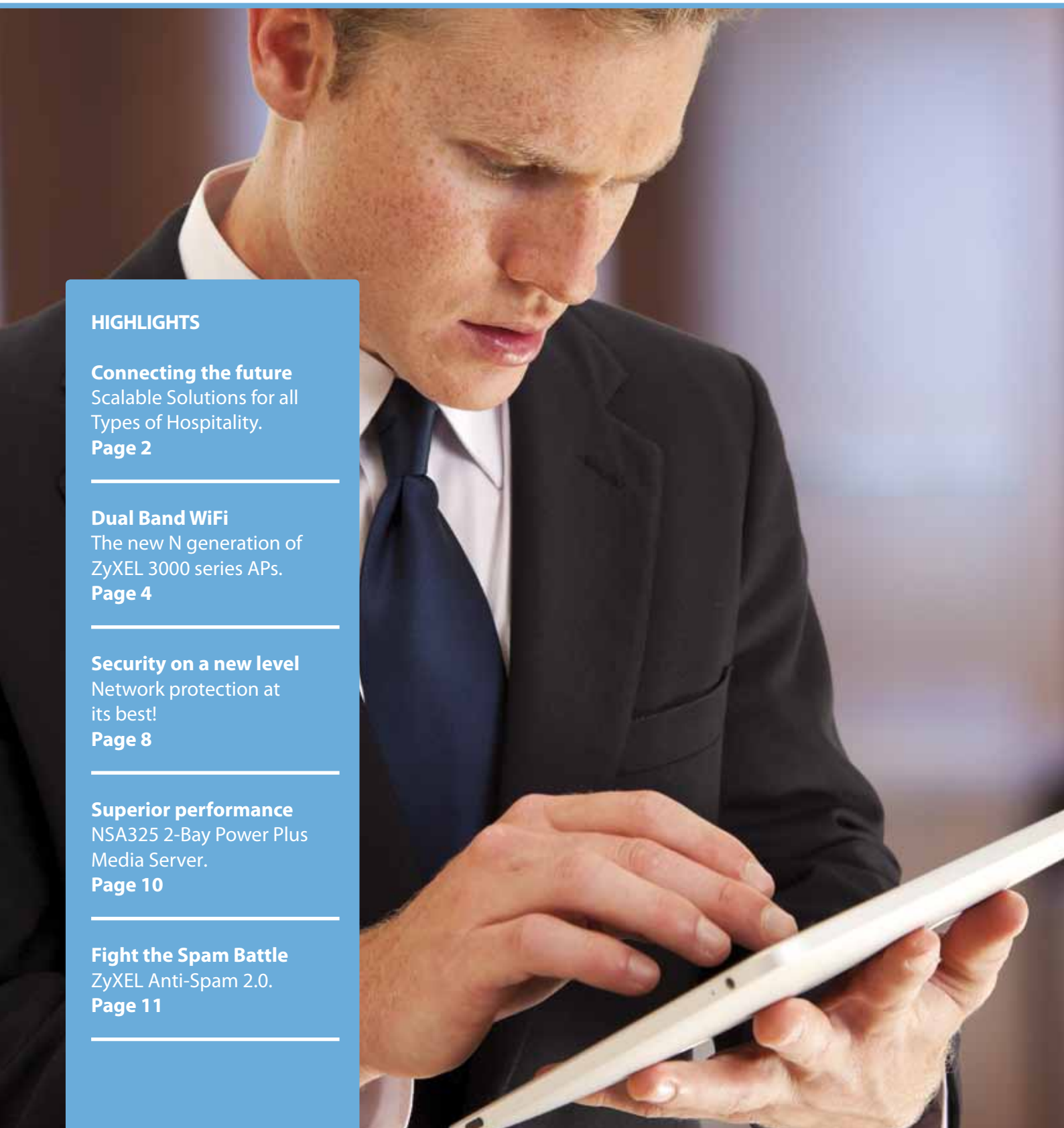
ZyXEL

News Magazine for Resellers

Winter | 2011 | 2012

IMPULSE



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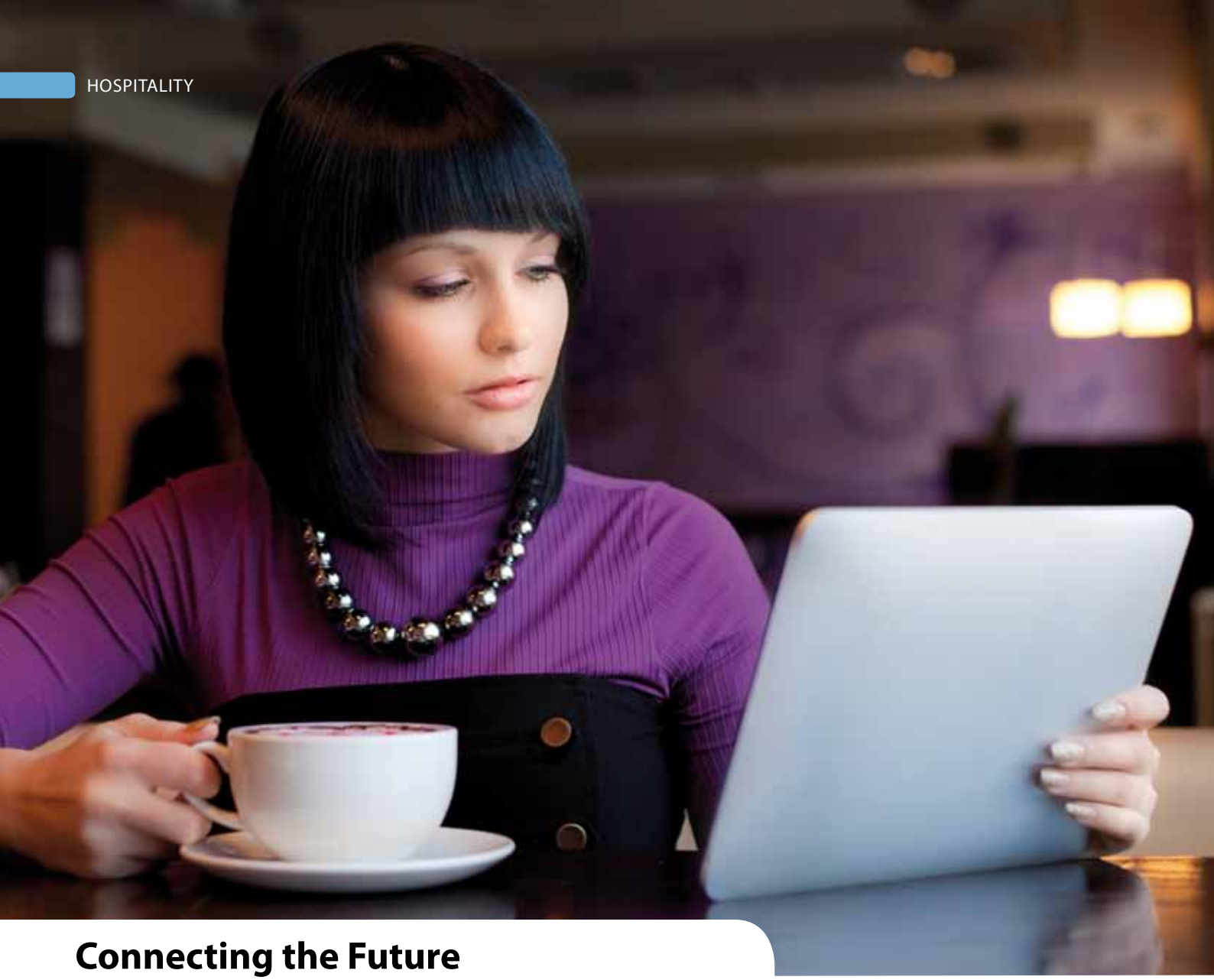


Connecting the Future

Realise your business potential, maximise customer retention and service levels by embracing the latest technology to deliver Internet access with ZyXEL hospitality solutions. There are no running costs or fees and it can be easily managed and operated by the customer's personnel.

Scalable Solutions for all Types of Hospitality
The hospitality industry includes a vast array of businesses ranging from hotels, leisure centres, theme parks, conference venues, sports stadiums, airports to retail hospitality in the form of bars, restaurants and chains of coffee houses. These businesses are striving to deliver superior levels of service throughout every part of their organisation and to maximise how these additional services can create new revenue streams and provide a competitive edge.

From Internet to Triple Play Service
One way to achieve this is to provide broadband Internet connectivity services for customers throughout the business. This is the first step as once deployed, broadband can enable other applications such as Voice over IP (VoIP), Video on Demand (VoD) and video streaming. These applications are already becoming common place and are being deployed in the more innovative hospitality environments.

Customer Satisfaction as a Business Advantage
Offering Internet access increases not only the attractiveness of the business and the satisfaction of the guests. It also represents enormous potential for increased revenue and the marketing of special offers and promotions. With ZyXEL hospitality solutions it is especially easy for hospitality operators that wish to invest in their own system. They become independent and can freely integrate this service into business and marketing activities.

Internet Infrastructure:
– Flexibility and pricing freedom
– Integral Internet service offerings
– No running costs or fees
– Increased attractiveness of business
– Enhanced service for guests
– Simple maintenance and operation by personnel
– Increased marketing potential

Local information: www.zyxel.eu/impulse

AT A GLANCE

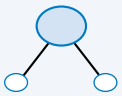
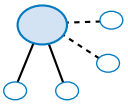
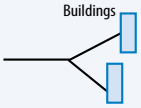
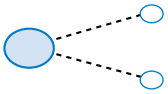
Why ZyXEL?
- High bandwidth & superior performance with IEEE 802.11n standard support
- Over 400,000 European companies choose ZyXEL for enterprise solutions
- A history of delivering the finest communications technology available today for business
- Providing customers with the ability to develop their business with industry-leading support

WHICH ZYXEL PRODUCTS?

Please continue to read our next article 'The Rise and Rise of Dual Band WiFi' where we feature the NWA3550-N which is perfectly suited to the hospitality environment.

Application Quick Finder

recommended = ★★★ standard = ★

Type	Basic	Advanced	Professional	Residential	Outdoors
Customer's need					
I need internet service in	Public areas	Multi-site	Multi-site, large scale	Buildings	Outdoor areas
I want	1. Simple steps to provide internet access 2. Billing system 3. Session trace	1. Security features 2. Billing system 3. Session trace	1. Complete solution 2. Billing system 3. Work with PMS system 3. Session trace	1. Efficient solution 2. Leverages existing telephone wiring	1. Work in wide range 2. Billing system 3. Session trace
ZyXEL solution offering					
Description	Basic equipment and an economical way to provide your visitors with uncomplicated internet access	Expanded equipment including security features and additional hardware for multi-sites	The complete solution for excellent service in all areas with parallel usage for efficient internal communication	Efficient networking on existing two-wire structures or fibre for large properties and facilities	Efficient and cost-effective high-speed internet access hotspot solution with multiple access points to cover larger areas
Topology	Single site	Multi-site  via WDS/POE/electrical wiring/ phone line	Multi-site, large scale 	Buildings  via telephone wiring/ Ethernet fibre	 Wide range
Suitable for					
Hotel	Small-sized ★★★	Small and medium-sized ★★★	Medium and large-sized ★★★	Exclusive holiday complexes ★★★	Medium and large-sized with outdoor area ★★★
Restaurant / Cafe	★★★	★	★	★	★
Camping site	★★★	★★★	★★★	★	★★★
Gaming	★★★	★★★	★★★	★	★
Cruise ships	★★★	★	★	★	★
Exhibitions	★★★	★★★	★	★	★★★
Sport stadiums	★★★	★★★	★	★	★★★
Public areas	★★★	★	★	★	★★★
Clinics	★★★	★★★	★★★	★	★

WHAT ARE THE BENEFITS FOR HOSPITALITY BUSINESSES?

Create Customer Loyalty

Experiencing secure, always-on and easy-to-use connectivity is a good way to make customers feel way to increase customer satisfaction.

Increase Revenue Opportunities

A well-designed broadband Internet access solution offers an extensive range of marketing and revenue enhancing opportunities such as:

- In-room revenue
- Meeting room revenue
- Online advertising income
- E-commerce
- Special services such as VoIP, printing online, VoD, etc.

Increase Occupancy

A complete, easy-to-use broadband Internet infrastructure attracts more customers, increases occupancy rates and enhances perception of the hotel brand.

Offer Robust Security and Regulatory Compliance

The solution allows authorised users onto the network and keeps data private as it travels through the airwaves. It keeps security threats at bay and enables business to comply with EU Directives.

Improve ROI

Through feature-rich products, operational simplicity, and flexible architecture, ZyXEL hospitality solutions can help to improve profits and protect investments.

Benefits for Hospitality Resellers

- The hospitality market has a high growth potential
- ZyXEL offers complete hospitality solutions
- Potential new vertical market for resellers
- Up selling opportunity due to an open architecture
- Quick and easy hotspot as 'door opener' to attract new customers
- Opportunities to add your own service offerings to the solution
- Comprehensive training and marketing support by ZyXEL

The Rise and Rise of Dual Band WiFi

Market research has shown that not only is IEEE 802.11n establishing itself as the WiFi technology of choice but to guarantee connectivity in today's multi device, always available on the web environment choosing the right frequency band is critical to ensure ubiquitous connectivity in your WLAN deployment.

ZyXEL NWA3560-N
Dual-Radio Business Access Point

ZyXEL NWA3550-N
Dual-Radio Outdoor Business Access Point

Evolution of connectivity

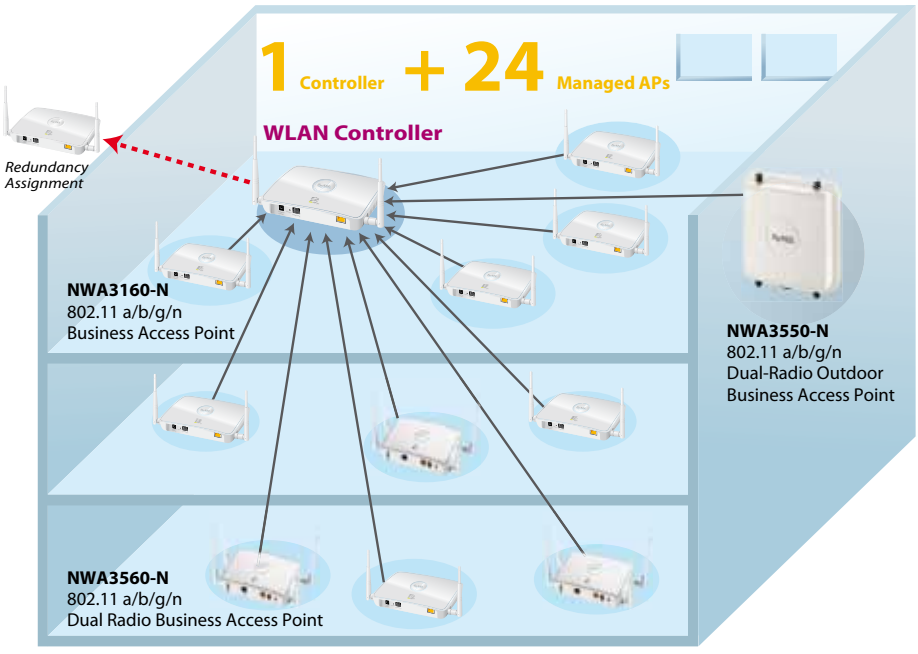
Historically when a business user entered a location where wireless LAN networking was available life was simple. The user probably had one device usually a laptop that they wished to connect so that a link could be established to their office for e-mail or connection to servers or resources within the business. The wireless was probably only available in a limited amount of locations and was restricted to certain areas of that location. This meant the risk of interference or lack of connectivity hardly ever occurred.

Today as that same business user enters the location of his choice he can spend the next 20 minutes connecting his laptop, tablet, smart phone and e-reader to the available wireless LAN internet connection. Then once he has started this process often he realises that there is insufficient bandwidth and possibly insufficient available associations for him to connect. So why is this?

Overcoming the overcrowding issues

Most installed wireless LAN Networks prior to 2011 operated using the 2.4Ghz Spectrum or Frequency band. These installations along with the IEEE 802.11 standard of WLAN as a technology became prolific with 802.11b and 802.11g variants as the WLAN standards based technology market leaders. This alongside the massive install base of 2.4Ghz clients in the shape of laptops and now more recently tablets and smart devices made the choice of which spectrum to use when designing a wireless network quite simple. The alternative in more recent years has been the IEEE 802.11a variant, which utilises the higher 5GHz frequency. Installations were less common due to interoperability with common client devices however due to overcrowding in the 2.4Ghz Spectrum and enhancements in WiFi chip technology the IEEE 802.11a 5Ghz frequency is significantly growing in popularity.

N series Network Diagram



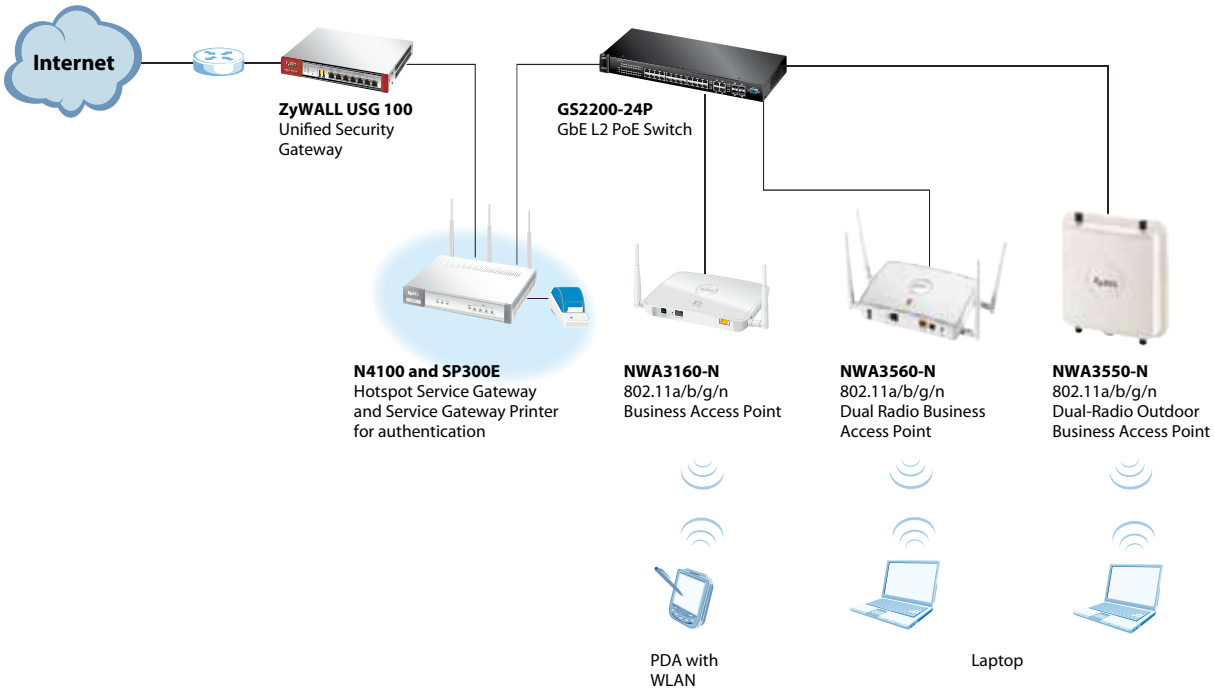
Signal interference problems

One of the main issues with installing Wireless LAN networks is the popularity of the technology. 2.4Ghz Wireless LAN networks can experience RF interference from microwaves, cordless phones and more importantly in recent times are very susceptible to interference from other 2.4Ghz Wireless LAN networks. The signal interference degrades the performance of the network by blocking or disconnecting users or access points from communicating. It is not easy to reduce established 2.4Ghz interference as you cannot make businesses on other floors in your building or near you stop using WiFi, so you should consider deployment of the 5Ghz Frequency band. The IEEE 802.11a 5Ghz frequency band operates at lower levels when compared to the 2.4Ghz frequency band which reduces interference and offers higher 802.11n data rates.

Performance v connectivity

From a performance perspective the 5Ghz frequency has a much greater spectrum available which means you would get a significant increase in performance over the 2.4Ghz frequency. This is achieved by the use of the 802.11n technologies optional 40Mhz channels instead of the more traditional 20Mhz and is the only way to really achieve the highest quoted performance and speeds of an 802.11n network.

From a supported WiFi client and device perspective the first devices that support the 802.11n a/b/g/n wireless LAN technologies are becoming available on the marketplace and new versions of the most popular tablets are also quoted as supporting both the 5Ghz and the 2.4Ghz frequency to enhance performance



and connectivity options. For legacy networks who wish to expand and new green field WLAN installations it is not only worth considering WLAN Access Points which support either the 5Ghz and 2.4Ghz spectrums, it is also worth considering deploying more highly featured dual radio and dual band access points. This is so that the installation can support the popular legacy devices as well as the new high performance ones required for the latest applications.

Next Generation

The new N generation of ZyXEL 3000 series APs features the dual-band NWA3160-N and two dual band and dual-radio AP's the NWA3560-N for internal deployments and the new NWA3550-N for outdoor applications. All of these business class APs offer the usual enterprise features in addition to being capable of operating as a standalone AP, managed AP or to support the ZyXEL hybrid wireless controller function and RADIUS server.

Hybrid Manageability

Simplified Management is achieved when one of the ZyXEL 3000 Series N AP's is set to hybrid controller mode as opposed to the standalone or managed AP mode, the NWA3160-N, NWA3560-N and NWA3550-N can centrally manage up to 24 additional APs for diversified applications. The capability to support a wide range of managed APs enables network administrators to choose the best AP suitable for the desired applications, and the management interface propagates information to each single AP, helping the staff to easily oversee all the APs, even from remote locations.

Local information: www.zyxel.eu/impulse

WLAN-Access-Point Comparison Matrix

	ZyXEL NWA3160-N NEW	ZyXEL NWA3560-N NEW	ZyXEL NWA3550-N
Wireless Frequency	2.4/5 GHz	2.4 and 5 GHz	2.4 and 5 Ghz
Radio	1	2	2
Number of Antenna	2T2R MIMO	2T2R MIMO	4 N type connectors
PoE	✔	✔	✔
PoE Power Draw	11W	14W	28W
WLAN Max. Net Throughput	up to 120Mbps	up to 120Mbps	up to 120Mbps
SNMP	✔	✔	✔
RADIUS Authentication	✔	✔	✔
Embedded RADIUS Server	✔	✔	✔
Rogue AP Containment	✔	✔	✔
Deployment	Internal	Internal	External

FEATURES

ZyXEL NWA3160-N and ZyXEL NWA3560-N

- High bandwidth & superior performance with IEEE 802.11n standard support
- The 3-in-1 solution: a WLAN controller, a standalone AP or a managed access point
- Centralized management for up to 24 access points

ZyXEL NWA3550-N

- High bandwidth & superior performance with IEEE 802.11n standard support
- The 3-in-1 solution: a WLAN controller, a standalone AP or a managed access point
- Centralized management for up to 24 access points
- External

Controlling Mobile Users in Business

Business today faces increasing challenges in controlling and managing users of the IT Infrastructure without compromising the security of the network. Increasing numbers of users are wanting to migrate across the companies premises from their desk to a meeting room as either a guest user or as an employee of the organisation.

Unified Access Solution

More and more businesses are inviting consultants or guests to hot desk or connect in different locations and meeting rooms within the organisation. Handling the migration and access to company resources requires a unified access solution that identifies users at the edge of the network and delivers the required applications securely.

The normal way to address this connectivity would be to either just plug the users device into the Ethernet network and hope they get connectivity or to share the company WiFi SSID and associated secure key, both of these situations effectively compromise the security of the IT infrastructure and could introduce critical issues into the network. The ideal scenario is to have an edge based authentication or access control methodology that is in place if the user connects to either the wired of wireless solution.

Combining the latest 2.24 Firmware for the NXC5200 and the 4.0 Firmware for the XGS and GS2200 Switch Series delivers a comprehensive edge access solution for business.

Access Management

Within the Network deployment the NXC5200 WLAN Controller provides the management platform the consolidation of access across the wireless and wired network. The IT manager in the organization can setup administrators within the network. These could be a receptionist within the business or hospitality environment or trusted individuals within each department. The new features enable these localized administrators to create and printout guest access tickets. To support this function in the firmware a new user profile called "guest-manager" has been created alongside the capability for the administrator to define a new user group setting called 'Dynamic Guest Setting'. This profile enables the administrator to define content that is printed on the tickets and could include the SSID, security keys and policies of the organization regarding to internet content and downloads. The guest manager can also monitor active accounts and check which are still active and delete any that have expired.

ZyXEL NXC5200
Wireless Business Controller

'THE IDEAL SCENARIO IS TO HAVE AN EDGE BASED AUTHENTICATION OR ACCESS CONTROL METHODOLOGY THAT IS IN PLACE IF THE USER CONNECTS TO EITHER THE WIRED OF WIRELESS SOLUTION.'

Dynamic guest deployment

By deploying the dynamic guest setting users could provide guest access in scenario's such as a large hospitality environment. Collaboration with visitors, other business employees and local staff require different degrees of network access to be offered while they are visiting the business. To give these guests the access they need, one of the biggest challenges facing IT departments is how to provide Internet connectivity, without giving guests access to private LAN resources or to have limited access with authentication. The dynamic guest setting enforces the profile of the user across the network and pushes such users directly to the defined resource such as the Internet connectivity without compromising the internal applications or network resources.

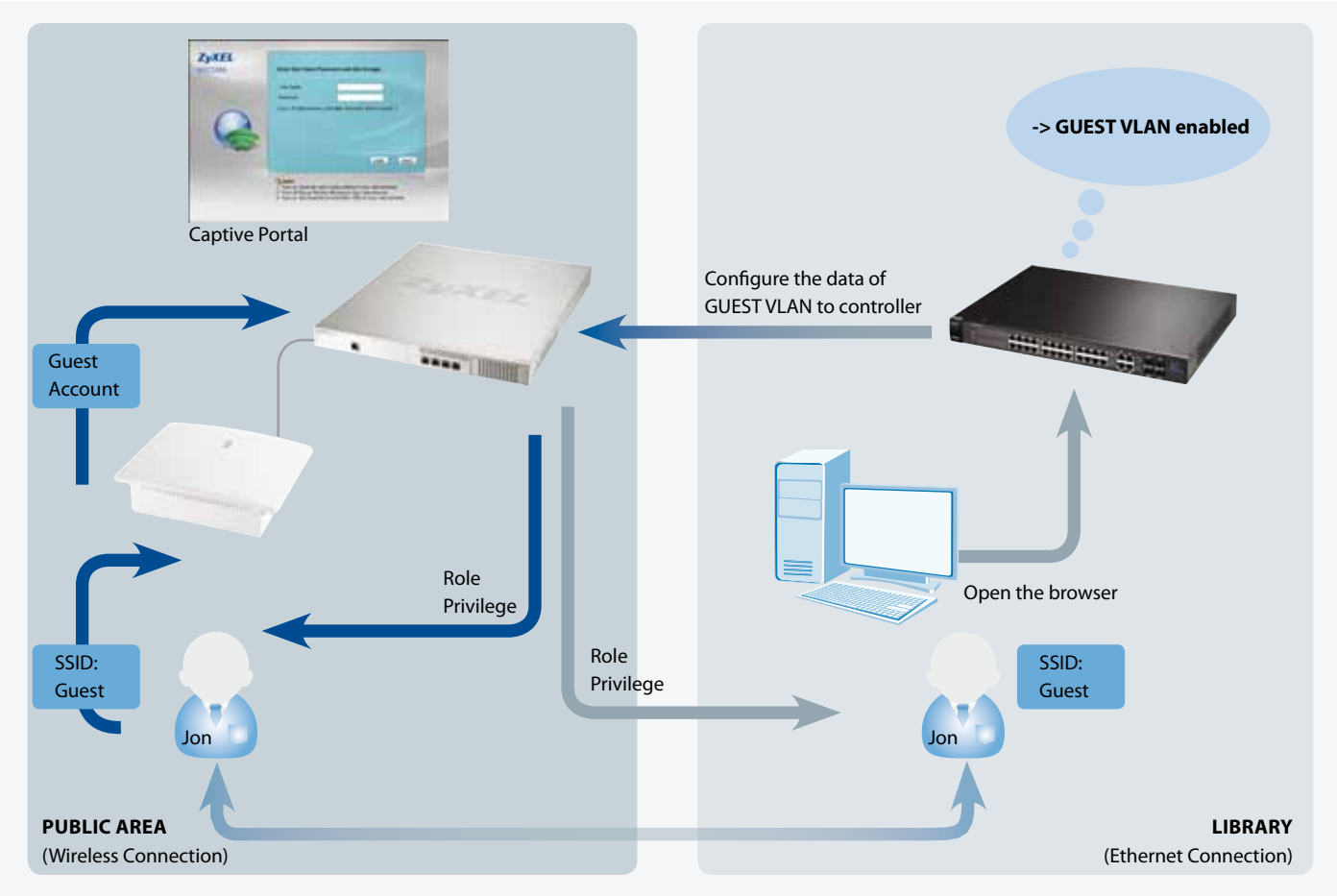
Captive Portal

A captive portal intercepts all network traffic regardless of address or port until users authenticate their identity through a designated login Web page. As an added security measure, the NXC contains captive portal functionality; this means that all Web page requests can be initially redirected to a special Web page that requires guests to authenticate their sessions against the database generated by the IT manager or guest manager.

Once the authentication processes are successful, guests can then connect to the rest

ZyXEL XGS-4526
10-Gigabit Ethernet switch managed L3

ZyXEL GS2200-24P
Gigabit Ethernet switch managed L2



Unified access management for guest users

of the network or if they are part of the dynamic account profile they will only be connected to the Internet. Text content on the captive portal screen may be customised with company logos, backgrounds, policies and other descriptive text. A captive portal provides guests with controlled access to the network while keeping the internal network secure.

Unified Authentication and Protection

Within the switch network the user is also checked to see if they can pass the IEEE 802.1x authentication protocol. If they can they will be authenticated across the internal network against a radius or authentication server within the business network if the user authenticates successfully they will be provided with the access to the IT managers defined resources for internal employees. If the user does not authenticate or does not support the IEEE 802.1x authentication protocol then they will be presented with the captive portal screen and directed via the dynamic guest setting which uses VLAN's defined in the switch network setup to push the user and their traffic directly towards the internet only.

The NXC5200 V.24 Firmware and the 4.0 XGS 4500 Series firmware is released and is available now from the ZyXEL website The 4.0 GS2200 Series firmware is scheduled for release in December.

Local information: www.zyxel.eu/impulse

ZyXEL NWA5560-N

Managed Wireless N Business Access Point

ZyXEL NWA5160-N

Managed Wireless N Business Access Point

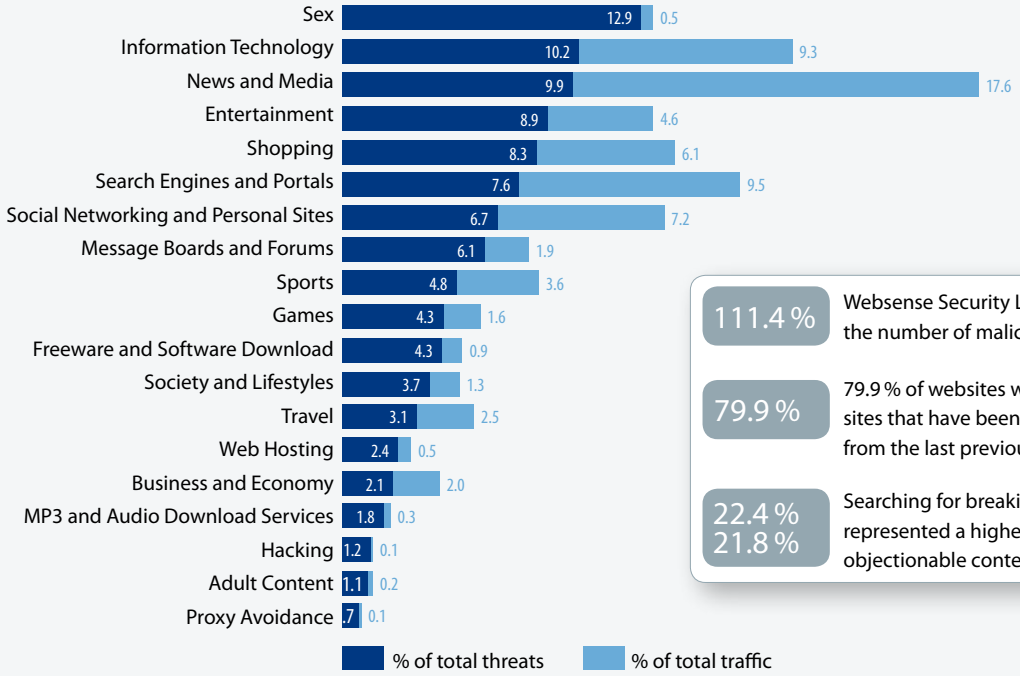
ZyXEL NWA5550-N

Dual-Radio Outdoor Managed Access Point

Security on a new level – The ZyWALL ZLD v3.0

The new 3.0 firmware for the ZyWALL USG product range from ZyXEL provides major enhancements for the USG series including a strongly improved performance, IPv6 support and an improved malware protection which is up-to-date with today`s threats.

The following graphic shows the number of visited pages containing malicious links for a sample of hosted Web traffic pulled during 2010.


Sex 12.9 0.5
Information Technology 10.2 9.3
News and Media 9.9 17.6
Entertainment 8.9 4.6
Shopping 8.3 6.1
Search Engines and Portals 7.6 9.5
Social Networking and Personal Sites 6.7 7.2
Message Boards and Forums 6.1 1.9
Sports 4.8 3.6
Games 4.3 1.6
Freeware and Software Download 4.3 0.9
Society and Lifestyles 3.7 1.3
Travel 3.1 2.5
Web Hosting 2.4 0.5
Business and Economy 2.1 2.0
MP3 and Audio Download Services 1.8 0.3
Hacking 1.2 0.1
Adult Content 1.1 0.2
Proxy Avoidance .7 0.1
% of total threats
% of total traffic

111.4 % Websense Security Labs identified a 111.4 % increase in the number of malicious websites from 2009 to 2010.

79.9 % 79.9 % of websites with malicious code were legitimate sites that have been compromised – an increase of 3 % from the last previous period.

22.4 % 21.8 % Searching for breaking trends and current news represented a higher risk (22.4 %) than searching for objectionable content (21.8 %).

Source: Websense, 2010 Threat Report

Customer Challenge for 2011: Web-based Threats

Network protection at its best
In today`s world it is more important than ever to fight network threats with a state-of-the-art security deployment. With the new major v3.0 release, ZyXEL`s proven ZyWALL USG series now provides a new level of security features helping you to protect networks to the highest level.

Excellent Performance
The new firmware boosts the performance of the ZyWALL series significantly by using the Fast-path technology to support both single-core and multi-core HW platforms – with an up to 30 % growth over the previous v2.2x. These significant performance enhancements will help users cope with the ever more demanding throughput requirements, so that their network is safe and fast at the same time.

IPv6 support
With the introduction of v3.0 the USG series will support IPv6. IPv6 is designed to solve the problems of IPv4 and is already increasingly requested by the markets. Especially for public tenders IPv6 has become a more and more of a mandatory item. IPv6 is a new protocol version which serves the function of IPv4, but without the same limitations of IPv4. IPv6 is not totally different from IPv4: what you have learned in IPv4 will be valuable when you deploy IPv6. The differences between IPv6 and IPv4 are in five major areas: addressing and routing, security, network address translation, administrative workload, and support for mobile devices. With the new 3.0 firmware ZyXEL launches the first phase of the implementation for the IPv6 with focus on Dual stack, 6rd & 6to4 transition and host, router and firewall functionality. ZyXEL has focused on these areas because major ISP phase 1 deployments need 6rd for their investment protection and the new ISP equipment will need dual stack support. Also a firewall is required due to the fact that there is no NAT protection in IPv6. In phase 2 and 3 following later in the year we will integrate additional parts such as Dynamic routing, IPSec, IDP or IKEv2.

Fight the malware battle – Anti-Spam 2.0
With the v3.0 we will see another major enhancement for the ZyWALL USG series. In addition to the currently free Anti-Spam solutions on the USG we will introduce one of the industry's leading Anti-Spam solution as a UTM service on our platform. The Anti Spam solution service provided by Commtouch ensures an excellent solution with advanced mechanisms to grant high performance and excellent detection rates.

The key features are:
Increased Detection Rate
- Much improved detection rate & accuracy, with very low false positives
- Can do rate limit – mitigating the gray areas

Real-time Response
- Commtouch's Unique RPD technology – block all associated messages in real time
- Zero-Hour Virus outbreak protection

Good Performance
- 'Sender-based IP reputation' removes over 80 % of unwanted mail
- Intelligent cache: around 70% of cache hit rate – meaning only 30 % of messages needs to be queried
- Very small footprint (only 500 bytes per message digest) – minimising WAN bandwidth usage

Trustworthy – user data privacy is maintained
- The digest of data sent for query doesn't include continuous data content; only some displaced single words are collected. This keeps central site from knowing content of user data. In turn, user privacy is maintained.
- Also, very good query response time & reliability: database server in the cloud – with fast response time and high availability.

The new Anti-Spam solution provided by Commtouch will be available for all ZyWALL USG models including USG-20. The service can be ordered conveniently as an eLicense in a 1-Yr or 2-Yr version. For detailed information see also the AS article in this issue.

Fight the malware battle – Commtouch Content Filter

Another UTM service which comes with the new firmware version is the Commtouch Content Filtering solution. Current reports show that infected websites have become a major threat to the security of a network. With an increase of 111,4 % within only one year this threat has basically exploded. Given the fact that 79,9 % of the websites are actually legitimate websites makes this statistical data even more precarious. With the new Commtouch Content Filter solution you can not only enable real-time protection from emerging Web threats including malware, phishing and Zombies/bots but also ensure that HR compliance regulations are adhered to by preventing the browsing to questionable content like pornography and hate sites. Also the solution identifies sites that consume an organisation's bandwidth (e.g. movies, music) by enforcing bandwith regulations. Additionally this solution can help parents to restrict access to inappropriate Web sites.

'THE NEW FIRMWARE BOOSTS THE PERFORMANCE OF THE ZYWALL SERIES SIGNIFICANTLY BY USING THE FAST-PATH TECHNOLOGY.'

The Commtouch Content Filter solution is available as an E-Icard for all ZyWALL USG firewall appliances in a 1-Yr and a 2-Yr version. ZyXEL offers a 30-day CF trial along with the v3.0, even when you have our current Bluecoat content filter activated. For customers already using the Bluecoat Content Filter service it is possible to activate both options at the same time and switch from one to the other and vice versa however only ONE CF engine is in-use at any given time.

Easy VPN and many other enhancements

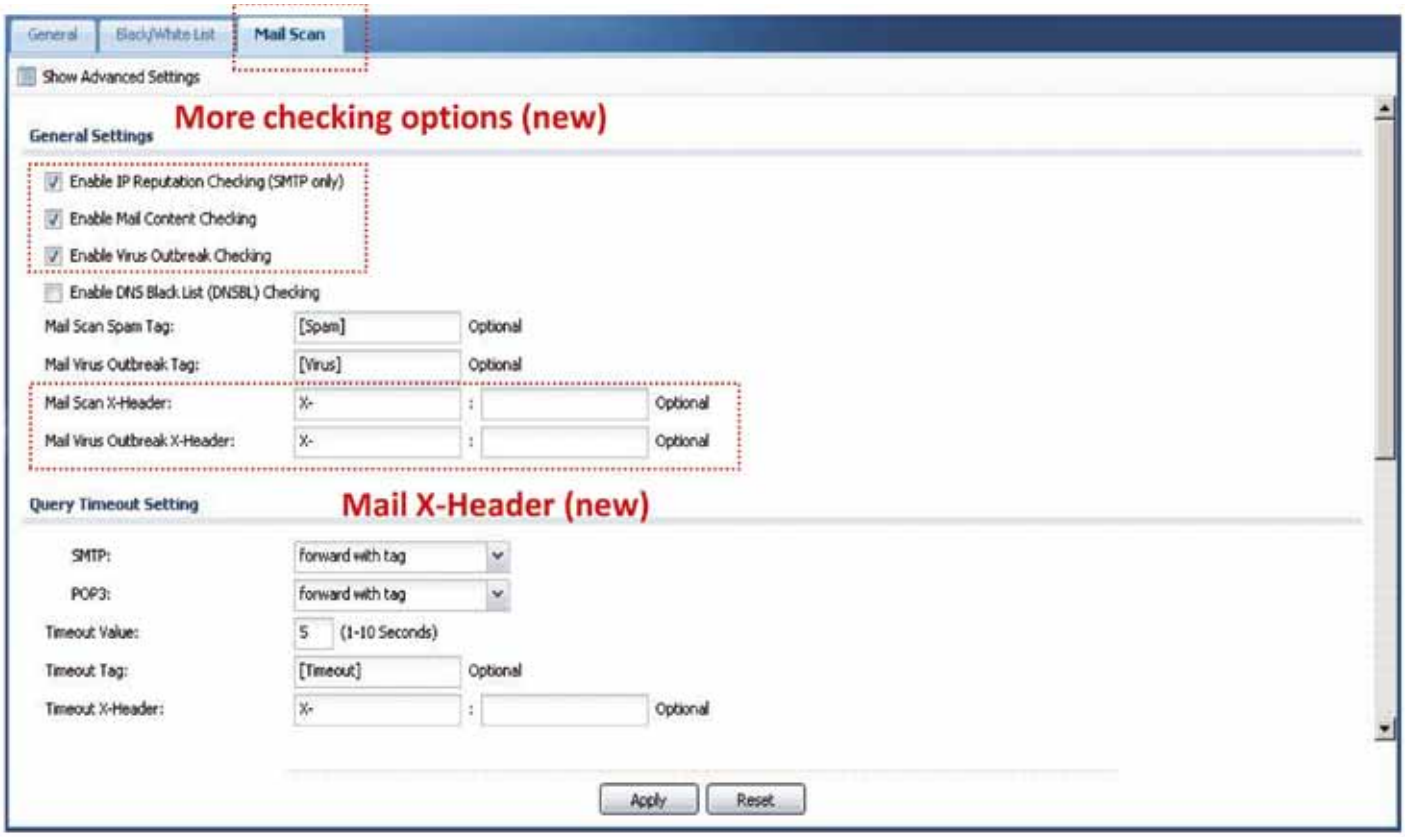
The new firmware version v3.0 comes with numerous further advantages such as the Easy VPN functionality. This feature allows an easy provisioning for the ZyWALL IPSec client. With the near clientless deployment the IPSec software shows a process similar to the SSL SecuExtender allowing stress-free auto provisioning. It is just install, reboot, and go!

Additionally many new enhancements such as VPN High Availability, complete DHCP options or a centralised service deployment with site-to-site VPN and many more are included in the new version.

Free Download

As you know it from ZyXEL the firmware is available free of charge on our ZyXEL Homepage as from January on. The new service licenses will also be available with the launch of the new firmware and can be ordered also from January on.

Local information: www.zyxel.eu/impulse



The new Anti-Spam 2.0 user interface shows the many available options

NSA325 2-Bay Power Plus Media Server

ZyXEL's new NSA325 is especially designed for power users and media enthusiasts who demand advanced high-performance media servers to play, share, store, and manage multimedia files. It also allows them to stream multiple HD multimedia contents in their Digital Home.

Superior performance for file transfer and multiple HD streams simultaneously
Powered by 1.6 GHz CPU and 512MB memory size, the NSA325 provides faster speed of multimedia streaming and sharing simultaneously to the different UPnP and DLNA certified devices, such as Microsoft XBOX360, Sony PlayStation3, and DLNA TV, in every room at home.
With the embedded USB3.0 port and copy/sync button, NSA325 brings you increased speeds of data backup and synchronization from USB mass storage devices or digital cameras.

The ZyXEL NSA325 features rich server technologies for multimedia sharing. Acting as an iTunes server, SqueezeCenter, personal blog and photo album server, the NSA325 can simplify streaming and sharing multimedia on PCs, laptops and SqueezeBoxes.

All-in-One Backup Solution to Protect Users' Valuable Data
The NSA325 provides a complete set of backup solutions for home and SOHO users. With the intelligent 'Copy/Sync' button, the NSA325 makes it even easier to copy to or from external USB storage devices, card readers and digital cameras. In addition, the 'Backup Planner' provides you the instant backup and scheduled backup from the NSA325 to other ZyXEL NSA-series products or external storage devices. Using simple setup steps, you can plan your backup schedule to suit your needs. Advanced functions such as data compression and synchronization also optimise the bandwidth and time for high-performance data backup.

Mobile Cloud Media Centre at Home
Make NSA325 your mobile cloud media centre at home. The new mobile applications of NSA325 make it easy for you to backup, playback, and download files freely. Working with Dropbox, NSA325 can backup files and send torrents from your smartphones or tablet PC to your NSA325 virtually anywhere.
When you are at home, the mobile application zMedia, designed for your iPhone, iPad or Android phones, can let you not only play videos, photos and music stored in NSA325, but also easily checks file download/upload status and configure your NSA325 remotely without powering up your PC or laptop.

zPilot™ for Media Auto-classification by Easy Drag-and-drop
The zPilot™ file auto-classification function of the NSA325 enables you to easily store and manage media files through simple drag-and-drop operations. With zPilot™ software installed via the NAS Starter Utility, you can drag one or more files/folders to the zPilot™ icon on the desktop, and the files/folders will be identified and delivered automatically to music, photo, video or other designated folders on the NSA325.

Just Click and Select, Easy to Enhance Features to fulfil your Needs for Network Applications
The user-friendly web-based NSA325 utility makes it easy and simple for users to enhance its features in minutes. Users can customise their preferred applications with just a few clicks via 'Package Management'. The selected application software can be automatically downloaded from ZyXEL website and installed. It can reserve storage space for applications you require and offer you real-time application software support as per your needs. In addition, users can immediately download the latest firmware from ZyXEL website to the NSA325 through the online auto-upgrade firmware service.

Local information: www.zyxel.eu/impulse

ZyXEL NSA325
2-Bay Power Plus Media Server

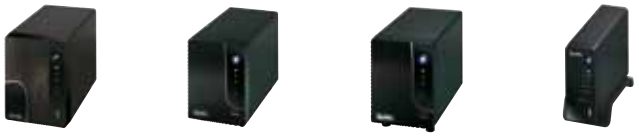
AT A GLANCE

Hardware Specification:
- Two 3.5" SATA II/III hard disk interface supported
- One Gigabit Ethernet RJ-45 connector
- Two USB 2.0 ports
- One USB 3.0 port

Network protocol
- TCP/IP (IPv4 & IPv6: Dual Stack)
- CIFS/SMB, NFS (for Linux/Unix)
- FTP, HTTP
- DHCP client
- PPPoE
- NTP (Network Time Protocol)
- Gigabit jumbo frame support up to 9 Kbytes

Network applications:
- UPnP AV server
- iTunes server support
- SqueezeCenter support
- Samba/FTP server support
- Photo album server
- phpMyAdmin/MySQL/PHP
- Support eMule/BitTorrent/FTP/HTTP downloads
- Auto-upload newly-added files to FTP servers, flickr and YouTube
- Download support

Home NAS Family Comparison Matrix



	ZyXEL NSA325	ZyXEL NSA320	ZyXEL NSA221	ZyXEL NSA310
Internal HD Support	3.5" SATA x2 (up to 6 TB)	3.5" SATA x2 (up to 6 TB)	3.5" SATA x2 (up to 6 TB)	3.5" SATA x1 (up to 3 TB)
CPU	1.6 GHz	1.2 GHz	370 MHz	1.2 GHz
External HD Support	USB2.0 x2 / USB3.0 x1	USB 2.0 x3	USB 2.0 x2	USB2.0 x1/eSATA x1
Gigabit LAN Port	1	1	1	1
Copy/Sync Button	✔	✔	✔	✔
RAID Support	0, 1, JBOD	0, 1, JBOD	0, 1, JBOD	JBOD
Media Server	DLNA 1.5 Media Server / UPnP AV Server	DLNA 1.5 Media Server / UPnP AV Server	DLNA 1.5 Media Server / UPnP AV Server	DLNA 1.5 Media Server / UPnP AV Server

ZyXEL Anti-Spam 2.0 – Fight the Spam Battle

SPAM is one of the biggest challenges facing Internet consumers, corporations, and service providers today. With their new Anti Spam 2.0 solution ZyXEL tackles this issue with one of the most advanced technologies in the market helping to keep network security and productivity at an excellent level.

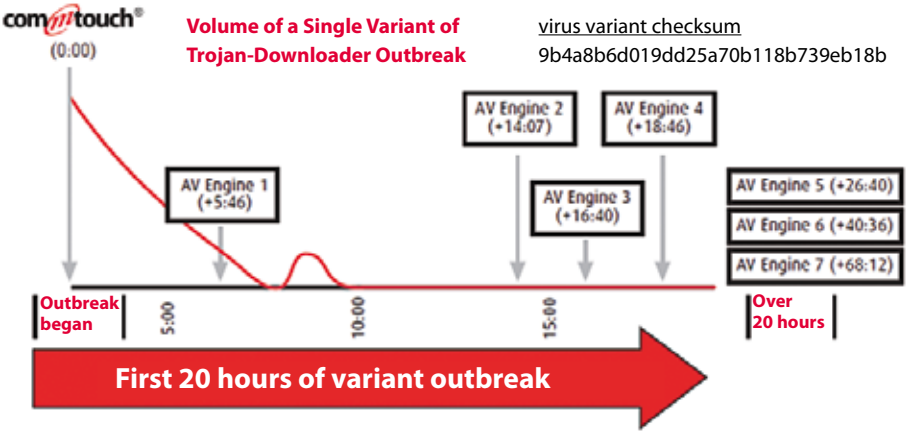
An excellent Anti-Spam solution

With spam and malware comprising of the majority of all e-mail, enterprises and service providers face bloated IT costs, and deterioration in the quality of service for valid traffic.
The new ZyXEL Anti-Spam solution provided by Commtouch is an excellent solution to fight spam. The new solution has many advantages including:

- High detection rate – blocking more than 97 % of spam threatening e-mail users
- Low false positives – less than 1 in 1.5 million reported false positives
- Complete global solution – protects against all types of spam with any content, in any location, format or language including image-based and double-byte languages
- Improved customer satisfaction due to real-time protection against spam
- Increased revenue by launching premium anti-spam solution in addition to current offerings
- Decreased engineering costs of keeping up with new spam attack tactics and sources

Zero-hour Virus Outbreak Detection

With global spam rates reaching 87 % and higher, and massive botnets capable of spewing millions of messages per hour, e-mail and security providers are faced with bloated bandwidth and deteriorating customer satisfaction. ZyXEL's Recurrent Pattern Detection (RPD) technology provided by Commtouch protects against spam outbreaks in real-time as messages are mass-distributed over the Internet. The unique content-agnostic technology detects and blocks spam in any language. Rather than evaluating the content of messages, the Commtouch Detection Centre analyses billions of e-mails in real-time, recognising and protecting against new spam outbreaks the moment they emerge. Also integrated 'Zero-hour Virus Outbreak Protection', USG blocks or delays suspect messages hours before commercial Anti-virus signatures are available.



With Commtouch's RPD technology, USG detects spam outbreaks as soon as they emerge, and blocks all associated messages in real time.

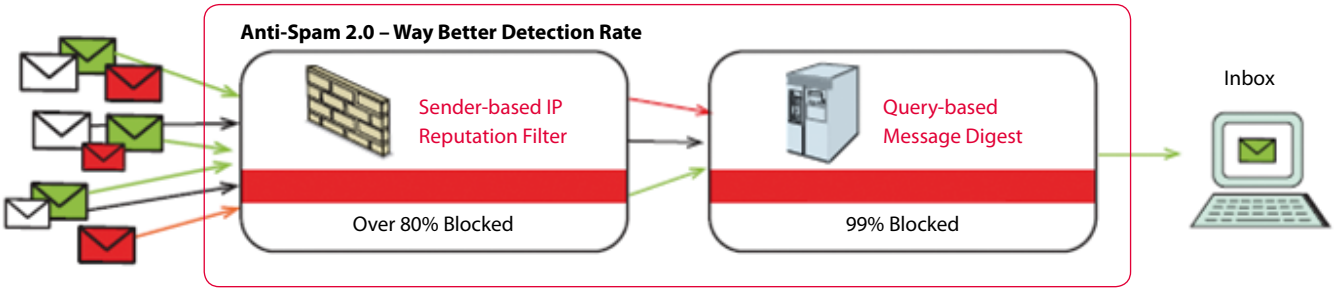
Highly accurate classification

The new solution offers a highly improved detection rate in comparison to other anti-spam solutions. With the sender-based IP reputation filter both the necessary systems resources and bandwidth can be reduced, which enhances the network performance greatly. The improved detection rate increases the security and in addition false positives are eliminated.

The query-based solution blocks spam based on its most fundamental characteristic – it's mass distribution. This makes it equally effective against all types of spam – in any location, format, content, or language. This proven technology is deployed in more than 130 countries and analyses billions of messages per week. It supports double-byte spam detection and its use is widespread among leading security vendors.

The new license comes as a 1-Yr and a 2 Yr version and is available for the whole ZyWALL USG range from January on.

Local information: www.zyxel.eu/impulse



The new Anti-Spam mechanisms provide an excellent detection rate.

Enjoy High Speed with your Home Entertainment

With the PLA4225 ZyXEL offers a high-performance four Gigabit ports powerline switch to make your smart home smarter. It is designed for the easy connection of multiple devices, such as SmartHDTVs, Blu-ray™ players, DVRs and DVB-x receivers and enable easy, fast network / internet access.

Blazing-fast speed for multiple HD streams
Powered by the latest IEEE1901 technology and four Gigabit Ethernet ports, the ZyXEL PLA4225 provides an all-in-one solution for users to enjoy multiple HD streams, multiplayer gaming and Web surfing simultaneously. In combination with the Powerline Ethernet Adapter, the PLA4225 makes it easy for you to connect up to four media devices, such as Internet HDTVs, Blu-ray™ players, DVRs, and game consoles, to the home network through any electrical outlet, in every area of your home.

QoS enhances media streaming quality
The advanced Quality of Service (QoS) features improve the quality of multimedia streaming applications such as triple-play services, HD video streaming, high-speed Internet access and VoIP.

Green product saves energy consumption
When there is no active Ethernet connection, the PLA4225 will enter the power-saving mode to reduce energy consumption by around 80 %, when compared to other powerline adapters without this function.

Easy security setup
Data transmission through PLA4225 is protected by the 128-bit Advanced Encryption Security (AES) to provide a secure connection to the Internet. As data encryption can be easily established by simply pressing a button on your PLA4225, there's no complicated setup or software required.

Local information: www.zyxel.eu/impulse

ZyXEL PLA4225

Powerline 4-Port Gigabit Switch

FEATURES

Ethernet interface
- Four 10/100/1000 Mbps RJ-45 connectors

Standard
- Compliant with IEEE 1901 with data transfer rate of up to 500 Mbps
- Compatible with HomePlug AV standard

Access Methods
- CSMA/CA channel-access schemes

HomePlug Modulation
- OFDM Symbol Modulation
- QAM 4096/1024/256/64/16
- QPSK, BPSK, ROBO Carrier modulation schemes

Range
- Max. range up to 300 meters over power line

Power Saving Mode
- If link is inactive for a period (default setting: 60 seconds)

Security
- 128-bit AES encryption

Quality of Service (QoS)
- ToS
- Support up to 4-level type QoS
- Support up to 8-level VLAN priority field

Powerline Comparison Matrix

	ZyXEL PLA4225	ZyXEL PLA4205	ZyXEL PLA-407	ZyXEL PLA-401
Description	500 Mbps Powerline 4-Port Gigabit Switch	500 Mbps Powerline Gigabit Ethernet Adapter	Powerline Pass-Thru Ethernet Adapter	Powerline Ethernet Adapter
Standard	IEEE 1901	IEEE 1901	HomePlug AV	HomePlug AV
PHY Rate	500 Mbps	500 Mbps	200 Mbps	200 Mbps
Plug-&-Play Design	Wall-Mount type	Wall-Mount type	Wall-Mount type	Wall-Mount type
QoS	✔	✔	✔	✔
Built-in Noise Filter	-	-	✔	-
Security Encryption	128-bit AES	128-bit AES	128-bit AES	128-bit AES
Ethernet Port	4 (10/100/1000 Mbps)	1 (10/100/1000 Mbps)	1 (10/100 Mbps)	1 (10/100 Mbps)
Power Outlet	-	-	1	-

For more (local) information please visit our website: www.zyxel.eu/impulse.
Feedback and enquiries: sales@zyxel.eu, support@zyxel.eu, marketing@zyxel.eu.
For information about the product availability please check with your local distributor.
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